

## ABSTRACT

An objective of the present invention is to provide a game system, program and image generating method which can generate  
5 a more realistic image with reduced processing load by using an alpha value set depending on a depth value. Z-value for each pixel in an original image is transformed into Z2-value that is formed of bits I to J which are positioned lower than the most significant bit in the Z-value. The alpha value for each  
10 pixel is set at a value corresponding to the Z2-value. Representation of the depth of field or fog image is enabled by using the alpha value to generate an image. The Z2-value is clamped to a given value depending on a bit value other than the bits I to J of the Z-value. Bits M to N and K to L (where  
15  $K \geq I \geq L > M \geq J \geq N$ ) in the Z-value are set as index numbers in LUT1 and LUT2 and used to perform texture mapping for transforming the Z-value into Z3- and Z4-values. These Z3- and Z4-values are used to determine the Z2-value.